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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,159	12/15/2003	Adrian P. Stephens	884.B50US1	4414

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SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402-0938

EXAMINER

AFSHAR, KAMRAN

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/736,159	Applicant(s) STEPHENS, ADRIAN P.	
	Examiner <i>K.A.</i> Kamran Afshar, 571-272-7796	Art Unit 2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>05/16/2005</u> | 6) <input type="checkbox"/> Other: ____ |

AN

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seshadri (U.S. Pub. No.: 2004/0114546 A1) in view of Sivanandan (U.S. Pub. No.: 2004/0009770 A1).

With respect to claims 1, 8, 13, 17, Seshadri discloses a system (See e.g. Page 3, ¶ [0026] - ¶ [0027]), an article comprising a machine-accessible medium (See e.g. Page 3, ¶ [0024]), an apparatus (i.e. access device) a first access point inherently including a receiver to locate a second access point inherently including a receiver (See e.g. AP1, AP2 of Figs. 2-4, Co. 3, ¶ [0021]). In an analogous field of endeavor, Sivanandan discloses receiving a request associated with a specification (See e.g. capability information) an access point capable of supporting the specification (See e.g., candidate list, optimal in terms of low charges, support access technologies, list of features, signal qualities: signal strength, a bandwidth, a signal-to-noise ratio, a signal-to-interference ratio, Page 1, ¶ [0003]). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to provide above teaching of Sivanandan to Seshadri to exchange to exchange (i.e. receiving / transmitting) a certain amount of capability information so that on one hand the network is able to offer to the mobile station such services which the mobile station is both capable and willing to utilize, and on the other hand the mobile station may optimize its operation for example by selecting a cell, from a list of potential candidate cells, which is most optimal in terms of low charges, adequate data rates or some other criterion (See Sivanandan e.g. Page 1, ¶ [0003]).

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Regarding claims 2, 14, Seshadri discloses receiving a list of candidate access points including the second access point at the first access point (AP1, Ap2 of Figs 3-4, 304a, 302a, Page 5, ¶ [0049]).

Regarding claim 3, Seshadri discloses the specification includes **at least one of a network type, a network capability, a network activity level, an access point capability, a signal strength, a bandwidth, a signal-to-noise ratio, a signal-to-interference ratio, a multipath condition, a service provider, a monetary cost, user-preferred information, a user-preferred service, a nominal packet size, a maximum packet size, a minimum service interval, a maximum service interval, a minimum data rate, a mean data rate, a maximum burst size, a minimum physical-layer rate, a peak data rate, a delay bound, a surplus bandwidth allowance, an acknowledgement policy, and a user priority** (See e.g. Page 1, ¶ [0009], Page 5, ¶ [0049], Page 5, ¶ [0052]).

Regarding claim 4, Seshadri discloses the access point capability includes a traffic specification (See e.g. 802.11 standard (See e.g. Page 1, ¶ [0008] - ¶ [0010]).

Regarding claims 5, 9, 16, Seshadri discloses the traffic specification is selected in accordance with an Institute of Electrical and Electronics Engineers (IEEE) 802.11 standard (See e.g. Page 1, ¶ [0008] - ¶ [0010]).

Regarding claim 6,15, Sivanandan discloses determining, by the first access point, that the second access point will support the specification (See e.g. Page 1, ¶ [0003]).

Regarding claims 7, 10, Seshadri discloses inherently constructing a list of candidate access points including the second access point (See e.g. Page 5, ¶ [0049]).

Regarding claim 11, Sivanandan discloses sending the request associated with the specification to at least one of the candidate access points including the second access point; and determining, by the second access point, that the second access point will support the specification (See e.g. Page 1, ¶ [0003]).

Regarding claim 12, Sivanandan discloses sending a list of access points capable of supporting the specification, including the second access point, to a device from which the request was received (See e.g. Page 1, ¶ [0003]).

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Regarding claim 18, the specification includes a traffic specification selected in accordance with an Institute of Electrical and Electronics Engineers (IEEE) 802.11 standard (See Seshadri e.g. Page 1, ¶ [0008] - ¶ [0010]), the first access point is to negotiate the specification with a station from which the request is received (See Sivanandan e.g. Page 1, ¶ [0003]).

Regarding claim 19, Seshadri discloses a transceiver inherently including the first receiver (See e.g. AP1, AP2, D of Figs 3-5); and a transceiver inherently including the second receiver (See e.g. 600 of Fig. 6).

Regarding claim 20, Seshadri discloses a memory (See e.g. 610 of Fig. 6) coupled to the first receiver (See e.g. 612 of Fig. 6), which could store a list of candidate access points including the second access point.

Regarding claim 21, Seshadri discloses a client unit to generate the request (See e.g. D of Figs 3-5).

3. Claim 22-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rom (U.S. patent 6,360,264 B1) in view of Sivanandan (U.S. Pub. No.: 2004/0009770 A1) further in view of Seshadri (U.S. Pub. No.: 2004/0114546 A1).

With respect to claims 22, 28, 31, Rom discloses an apparatus / a method and / or a self-determination (See e.g. self-organization, re-association, reconfiguration, etc. Co. 1, Line 60 – Co. 2, Line 17) request sent from a device (See e.g. 72, 74, 78 of Fig. 6, Co. 6, Line 35-46) capable of communicating with a first access point to the first access point, a second access point (See e.g. 78 of Fig. 6), and a request sent to the first access Point (See e.g. Co. 4, Lines 52-57), In an analogous field of endeavor, Sivanandan discloses receiving a request associated with a specification (See e.g. capability information, 802.11 standard, etc.) determining a second access point capable of supporting the specification (See e.g., candidate list, optimal in terms of low charges, support access technologies, list of features, signal qualities: signal strength, a bandwidth, a signal-to-noise ratio, a signal-to-interference ratio, Page 1, ¶ [0003]). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to provide above teaching of Sivanandan to Rom to exchange to exchange (i.e. receiving /

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transmitting) a certain amount of capability information so that on one hand the network is able to offer to the mobile station such services which the mobile station is both capable and willing to utilize, and on the other hand the mobile station may optimize its operation for example by selecting a cell, from a list of potential candidate cells, which is most optimal in terms of low charges, adequate data rates or some other criterion (See Sivanandan e.g. Page 1, ¶ [0003]). The motivation comes from Seshadri, so that the access device (i.e. 306) may be adapted to select the best candidate for a handoff from the candidate list based on signal strength, traffic load, bandwidth allocation, minimum / maximum data rate, 802.11 standard, etc (See Seshadri e.g. Page 5, ¶ [0049], Page 1, ¶ [0008] - ¶ [0010]).

Regarding claim 23, Seshadri discloses inherently constructing a list of candidate access points including the second access point See e.g. Page 5, ¶ [0049]).

Regarding claims 24, Seshadri discloses the access point determination request inherently includes a list of candidate access points including the second access point (See e.g. Page 5, ¶ [0049]).

Regarding claim 25, Seshadri discloses the access point capability includes a traffic specification (See e.g. 802.11 standard (See e.g. Page 1, ¶ [0008] - ¶ [0010]).

Regarding claim 26, Seshadri discloses the traffic specification is selected in accordance with an Institute of Electrical and Electronics Engineers (IEEE) 802.11 standard (See e.g. Page 1, ¶ [0008] - ¶ [0010]).

Regarding claims 27, 33, handing off a communication between the first access point and the device to the second access point (See Seshadri e.g. Page 5, ¶ [0049]) upon receiving an indication that the second access point is capable of supporting the specification (See Sivanandan e.g. Page 1, ¶ [0003]).

Regarding claim 29, Seshadri discloses a memory (See e.g. 610 of Fig. 6) coupled to the first receiver See e.g. 612 of Fig. 6), which could store a list of candidate access points including the second access point.

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Regarding claim 30, Sivanandan discloses a determination module to determine a capability of a candidate access point to support the specification comprising a traffic specification (See e.g. Page 1, ¶ [0003]).

Regarding claim 32, Sivanandan discloses sending the request to at least one of the candidate access points including the second access point; and determining, by the second access point, that the second access point will support the specification (See e.g. Page 1, ¶ [0003]).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Li et al. (U.S. Pub. No.: 2005/0111427 A1), which discloses SDMA Training And Operation.

b) Andrus et al. (U.S. Pub. No.: 2003/0203735 A1), which discloses Idle Handoff With Neighbor List Channel Replacement.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kamran Afshar whose telephone number is (571) 272-7796. The examiner can be reached on Monday-Friday.

If attempts to reach the examiner by the telephone are unsuccessful, the examiner's supervisor, Feild, Joseph can be reached @ (571) 272-4090. The fax number for the organization where this application or proceeding is assigned is 571-273-8300 for all communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Kamran Afshar


ERIKA A. GARY
PRIMARY EXAMINER